

Validity and Reliability of the Iranian Version of the Quality of Recovery-40 Questionnaire

Siamak Yaghoobi¹; Monadi Hamidfar¹; Douglas M. Lawson²; Bengt Fridlund³; Paul Stewart Myles⁴; Amir H. Pakpour^{5,6,*}

¹Department of Anesthesiology, Qazvin University of Medical Science, Qazvin, Iran

²Faculty of Medicine, Medical Education Research Centre, University of Calgary, Calgary, Canada

³School of Health Sciences, Jonkoping University, Jonkoping, Sweden

⁴Department of Anaesthesia and Perioperative Medicine, Alfred Hospital, Monash University, Melbourne, Victoria, Australia

⁵Social Determinants of Health Research Center, Qazvin University of Medical Sciences, Qazvin, Iran

⁶Department of Public Health, Qazvin University of Medical Sciences, Qazvin, Iran

*Corresponding author: Amir H. Pakpour, Social Determinants of Health Research Center, Qazvin University of Medical Sciences, Qazvin, Iran. Tel: +98-2813338127, Fax: +98-2813345862, E-mail: Pakpour_Amir@yahoo.com

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Background: Recovery after anesthesia and surgery is a complex process and depends on many factors such as patient, anesthesia and surgery conditions as well pre-existing comorbidities.

Objectives: The aims of this study were to translate the 40-item quality of recovery score (QoR-40) into Persian and evaluate its psychometric properties in Iranian patients.

Patients and Methods: We enrolled patients candidate for elective general surgery undergoing general anesthesia from July 2013 to December 2013 at Shahid Rajaee Hospital, Qazvin, Iran. Translation was performed based on Beaton's and Bullinger's recommendations. Estimates of internal consistency, test-retest reliability, concurrent validity, predictive validity and clinical validity were performed.

Results: All estimates of internal consistency were high (Cronbach's alpha = 0.89 for global estimates, subscales between 0.89 and 0.93). All test-retest scores and subscales were between 0.71 and 0.88. The correlation with a recovery visual analogue scale was 0.51, and all subscales correlated significantly with comparable subscales of the SF-36. An exploratory factor analysis found five-components and explained 52% of the variance. A confirmatory factor analysis based on the five-components, yielded good fit statistics (CFI = 0.93).

Conclusions: Overall, the Persian version of the QoR-40 was both conceptually and linguistically equivalent to the original English QoR-40. This study revealed that the Persian version of the QoR-40 is a valid and reliable instrument to assess the recovery quality in Iranian patients after surgery.

Keywords: Anesthesia; Medicine; Surgery